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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/683,590

10/09/2003

Mel G. Wieting

WIET-001

1024

7590

02/04/2005

Michael S. Neustel
Suite No. 4
2534 South University Drive
Fargo, ND 58103

EXAMINER

WACHSMAN, HAL D

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/683,590

Applicant(s)

WIETING ET AL.

Examiner

Hal D Wachsman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10-9-03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. The form PTO-1449 filed with the application has been considered however an IDS statement for this is not in the image file wrapper. Appropriate correction is required.
2. Page 4, lines 12-14, cite "...which is not anticipated, rendered obvious, suggested, or even implied by any of the prior art grain bin monitoring systems, either alone or in any combination thereof" and page 5, line 11, cites "...the shortcomings of the prior art devices", however as a specification (see 37 CFR 1.71) is a written description of the invention or discovery and of the manner and process of making and using the same, what is cited above which is similar to arguments that may be presented in the Remarks section of a reply to a prior art rejection, would appear to be inappropriate to have in a specification. Appropriate correction is required.
3. Page 9, line 18, of the specification, cites "as shown.." in which it appears that the word "is" may be missing before the word "as".
4. Claims 1-19 are objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claim 1, line 5, cites "a grain bin" however is this the same grain bin previously cited in the claim? This same type of problem also occurs in claim 11, line 6. Claim 1, line 5, cites "said sensor" however the antecedent basis is "at least one sensor". This same type of problem also occurs in claim 3, line 1, claims 5-9, line 1, claim 11, line 6, claim 13, line 1 and claims 16-19, line 1. Claim 10, line 2, cites "capable of" which implies that the transmitter unit may or may not do what is being claimed here. This same type of problem also occurs in claim 15, line 2. In claim 19, line 5, it appears

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that the word "an" is missing before the word "exterior". The examiner asks the applicant to better claim the limitations cited above. While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitations cited above. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3-9, 11, 13, 14 and 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Fromme et al. (US 2004/0031335 A1) .

As per claim 1, Fromme et al. (Abstract, figure 29D2, page 15, paragraph 0285) disclose "a main station". Fromme et al. (Abstract, figure 2) disclose "a transmitter unit in communication with said main station". Fromme et al. (Abstract, figures 2, 4C, 4D, 4F, 5, page 5 paragraphs 0081, 0089, 0093, 0094, page 6 paragraphs 0096, 0100) disclose "at least one sensor positionable within a grain bin for determining condition data...transmitter unit automatically forwards said condition data to said main station".

As per claim 3, Fromme et al. (Abstract, figure 4C, page 5 paragraph 0089) disclose the feature of this claim.

As per claim 4, Fromme et al. (Abstract, figure 4C, page 5 paragraph 0089, page 8 paragraph 0137) disclose the feature of this claim.

As per claim 5, Fromme et al. (pages 8-9 paragraph 0141, page 15 paragraph 0281) disclose the feature of this claim.

As per claim 6, Fromme et al. (Abstract, figure 4C, page 5 paragraph 0089, page 8 paragraph 0137, pages 8-9 paragraph 0141, page 15 paragraph 0281) disclose the feature of this claim.

As per claim 7, Fromme et al. (figures 4C, 4D, page 6 paragraph 0107, page 10 paragraphs 0153, 0155, 0166, page 19 paragraph 0317) disclose the feature of this claim.

As per claim 8, Fromme et al. (see at least abstract) disclose the feature of this claim.

As per claim 9, Fromme et al. (Abstract, figure 4C, page 5 paragraph 0089) disclose "an interior temperature sensor...of a grain bin". Fromme et al. (pages 8-9 paragraph 0141, page 15 paragraph 0281) disclose "exterior temperature sensor...of a grain bin". Fromme et al. (figures 4C, 4D, page 6 paragraph 0107, page 10 paragraphs 0153, 0155, 0166, page 19 paragraph 0317) disclose "a level sensor positionable within a grain bin...grain level within a grain bin". Fromme et al. (see at least abstract) disclose "a humidity sensor...within a grain bin".

As per claim 11, Fromme et al. (Abstract, figure 29D2, page 15, paragraph 0285) disclose "a main station". Fromme et al. (Abstract, figure 5, page 15 paragraph 0285) disclose "a central unit in communication with said main station". Fromme et al. (Abstract, figure 2) disclose "a plurality of transmitter units in communication with said central unit". Fromme et al. (Abstract, figures 2, 4C, 4D, 4F, 5, page 5 paragraphs 0081, 0089, 0093, 0094, page 6 paragraphs 0096, 0100) disclose "at least one sensor positionable within a grain bin for determining condition data... automatically forwards said condition data to said main station".

As per claim 13, Fromme et al. (Abstract, figure 4C, page 5 paragraph 0089) disclose the feature of this claim.

As per claim 14, Fromme et al. (Abstract, figure 4F, page 15 paragraph 0282) disclose the feature of this claim.

As per claim 16, Fromme et al. (Abstract, figure 4C, page 5 paragraph 0089, pages 8-9 paragraph 0141, page 15 paragraph 0281) disclose the feature of this claim.

As per claim 17, Fromme et al. (figures 4C, 4D, page 6 paragraph 0107, page 10 paragraphs 0153, 0155, 0166, page 19 paragraph 0317) disclose the feature of this claim.

As per claim 18, Fromme et al. (see at least abstract) disclose the feature of this claim.

As per claim 19, Fromme et al. (Abstract, figure 4C, page 5 paragraph 0089) disclose "an interior temperature sensor... of a grain bin". Fromme et al. (pages 8-

9 paragraph 0141, page 15 paragraph 0281) disclose "exterior temperature sensor... of a grain bin". Fromme et al. (figures 4C, 4D, page 6 paragraph 0107, page 10 paragraphs 0153, 0155, 0166, page 19 paragraph 0317) disclose "a level sensor positionable within a grain bin... grain level within a grain bin". Fromme et al. (see at least abstract) disclose "a humidity sensor... within a grain bin".

As per claim 20, Fromme et al. (Abstract, figure 4C, page 5 paragraph 0089) disclose "determining an interior temperature within a grain bin". Fromme et al. (figures 4C, 4D, page 6 paragraph 0107, page 10 paragraphs 0153, 0155, 0166, page 19 paragraph 0317) disclose "determining a grain level within said grain bin". Fromme et al. (see at least abstract) disclose "determining a humidity level within said grain bin". Fromme et al. (Abstract, figures 3, 4A, 4C, 4F, 5) disclose "accumulating said interior temperature, said grain level and said humidity level into a condition data". Fromme et al. (Abstract, figure 2) disclose "transmitting said condition data to a central unit". Fromme et al. (page 7 paragraph 0111, page 8 paragraph 0131) disclose that there can be multiple grain bins and thus the previous cited steps can be applied to those grain bins too. Fromme et al. (Abstract, figures 2, 5, page 15 paragraph 0285) disclose "transmitting said condition data to a main station". Fromme et al. (Abstract, figures 3, 4A, 4C, 4F, 5) disclose "accessing said condition data via a computer".

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 2, 10, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fromme et al. (US 2004/0031335 A1) in view of Kallestad (US 2003/0033057 A1).

As per claim 2, Kallestad (Abstract, figure 1, page 1 paragraph 0011, page 2 paragraph 0013, page 7 paragraph 0065, pages 7-8 paragraph 0667) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Kallestad to the invention of Fromme et al. as specified above because as taught by Kallestad (page 2 paragraph 0013) farmers or other purchasers of the aeration service may then be able to use client

computers to access information relating to their grain and the aeration service provided for that grain, e.g. via a web browser interface.

As per claim 10, Kallestad (see at least abstract) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Kallestad to the invention of Fromme et al. as specified above because as taught by Kallestad (page 1, paragraph 0004) aeration can be used to achieve or approach a desired temperature and/or a desired moisture content for stored grain to increase its usability.

As per claim 12, Kallestad (Abstract, figure 1, page 1 paragraph 0011, page 2 paragraph 0013, page 7 paragraph 0065, pages 7-8 paragraph 0667) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Kallestad to the invention of Fromme et al. as specified above because as taught by Kallestad (page 2 paragraph 0013) farmers or other purchasers of the aeration service may then be able to use client computers to access information relating to their grain and the aeration service provided for that grain, e.g. via a web browser interface.

As per claim 15, Kallestad (see at least abstract) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Kallestad to the invention of Fromme et al. as specified above because as taught by Kallestad (page 1, paragraph 0004) aeration can be used to achieve or approach a desired temperature and/or a desired moisture content for stored grain to increase its usability.

9. The following references are cited as being art of general interest: Salmon, Jr. (6,608,491) which disclose a container level monitoring system, Olmsted et al. (5,957,773) which disclose measuring grain characteristics, Eng (4,102,194) which discloses an electronic bin temperature monitor and Gookins (6,530,160) which discloses grain drying optimization.
10. No claims are allowed.
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Hal D Wachsman
Primary Examiner
Art Unit 2857

HW
February 1, 2005